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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,714	08/13/2001	Andreas Falkenberg	2001P14844US	8927

7590 09/06/2005  
Siemens Corporation  
Attn: Elsa Keller, Legal Administrator  
Intellectual Property Department  
186 Wood Avenue South  
Iselin, NJ 08830

EXAMINER

TORRES, JUAN A

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/929,714

Applicant(s)

FALKENBERG, ANDREAS

Examiner

Juan A. Torres

Art Unit

2631

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 22 August 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see attachment. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-22.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Information Disclosure Statement*

The information disclosure statement filed on 08/13/2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### *Response to Arguments*

Applicant's arguments filed 08/19/2005 have been fully considered but they are not persuasive.

Regarding claims 3, 13 and 18:

The Applicant contends, "Examiner states that the formula  $S_{QPSK}(t) = (\text{real}(S(t)) + \text{imag}(S(t))) * (\text{real}(S(t-1)) - \text{imag}(S(t-1)))$ , can be derived using simple calculus from the equation of Dutta. Applicant respectfully disagrees and asks that Examiner disclose this simple calculus."

The Examiner response and asserts, that, as indicated in the previous Office Action:

$$\begin{aligned} S_{QPSK}(t) &= S'(t) = S(t) * S^*(t-1) = \\ &= (R(t) + j I(t)) * (R(t) + j I(t)) = \\ &= ( \text{real}(S(t)) + \text{imag}(S(t)) ) * ( \text{real}(S(t)) - \text{imag}(S(t)) ); \\ &\text{where } \text{real}(S(t)) = R(t) \text{ and } \text{imag}(S(t)) = j I(t). \end{aligned}$$

So it is only a change of variable:  $\text{real}(S(t)) = R(t)$  and  $\text{imag}(S(t)) = j I(t)$ .

Regarding claims 1, 10, 15, 22, 2, 4-9, 11, 12, 14, 16, 17, 19 and 20:

The Applicant contends, "As a result Applicant respectfully request withdrawal of the rejection of claims 1, 10, 15, and 22. Applicant respectfully traverses any arguments posed by Examiner relative to claims 2, 4-9, 11, 12, 14, 16, 17, 19 and 20 as they are allowable for at least the reasons outlined above relative to claims 1, 10, 15, and 22."

The Examiner disagrees and asserts, that, as indicated in the previous Office Action, because the rejection of claims 3, 13 and 18 are maintained, the rejections of claims 1, 10, 15, 22, 2, 4-9, 11, 12, 14, 16, 17, 19 and 20 are also maintained.

Regarding claim 21:

The Applicant contends, "First claim 21 is directed to a method of demodulation. Kosaka2 describes an "apparatus for demodulating an incoming digitally phased modulated analog signal." (Kosaka2, Abstract emphasis added). Second Kosaka2 does not disclose, teach or suggest the look up table of claim 21. Kosaka1 describes a "digital DQPSK modulator" and Fig. 9 of Kosaka1 includes a truth table for performing mapping operations. The true table of Fig. 9, however, does not disclose, teach or suggest the look up table of claim 21. The mapping operation of Kosaka1 maps the three bit data to four parameters I1, I0, Q1, and Q0. Claim 21 includes mapping of the three bit data to one real number and one imaginary number. Additionally, the mapped values of Kosaka1 are all either one or zero. Claim 21 includes mapping to values that include  $\pm 0.707$ ."

The Examiner disagrees and asserts, that, as indicated in the previous Office Action, "Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Kosaka

(US 5369378) (hereto referred to as Kosaka1). Kosaka1 discloses a method for modulation of a communication signal, using Differential quadrature phase shift keying (DQPSK). Kosaka1 teaches obtaining a pair of communication bits, and translating the communication bits into three bit communication bits (column 6, lines 34-68, column 7, lines 1-24, and Figure 9). Kosaka1 teaches mapping the three bit communication bits into DQPSK symbols (columns 7-9, column 10 lines 1-29, and Figure 19).". First as it can be seen The Examiner doesn't use Kosaka2 to reject claim 21. Second claim 21 doesn't have any table.

The rejection of claim 21 is a statutory bar under 102(b). The technique presented in this application is very well known in the art, and it is used in the same way as described by the Applicant, as probed by the cited references. When two number always appear together (the imaginary part is always multiplied by  $j$ ) it is very well known to change the variable so this multiplication doesn't have to be done every time. Any implementer with ordinary skills in the art does it to save cycles.

The Applicant contends, "For at least the foregoing reasons, neither Kosaka1 nor Kosaka2 alone or in combination disclose, teach, or suggest the look up table of claim 21".

The Examiner disagrees and asserts, that, as indicated in the previous Office Action, claim 21 doesn't have any table.

The new amended claims have not been enter because they raise new issues that will required further consideration and/or search, and they don't deem to place the application in better conditions for appeal.


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A. Torres whose telephone number is (571) 272-3119. The examiner can normally be reached on Monday-Friday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Juan Alberto Torres, Ph. D.  
08-31-2005

  
**KEVIN BURD**  
**PRIMARY EXAMINER**